

# User Guide

## FORTANIX CONFIDENTIAL COMPUTING MANAGER – COMPUTE NODES

VERSION 3.0

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## 1.0 INTRODUCTION

Welcome to the Fortanix Confidential Computing Manager (CCM) User Guide. This document describes compute nodes and how to manage them using Fortanix CCM.

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## 1.1 COMPUTE NODES

Compute nodes are bare metal servers or virtual machines running in the cloud or on-premise.

Users can label compute nodes when registering to Fortanix Confidential Computing Manager (CCM) to provide identity and policy management on the compute nodes. Before running a Compute Node, it must be enrolled in the Fortanix CCM. This is called the Node Enrollment process.

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## 1.2 NODE AGENT

Fortanix Node Agent software enables registration of the compute nodes to Fortanix CCM when installed on a compute node.

The Node Agent assists in the verification of Hardware and Platform software running on the compute nodes.

The Node Agent also assists with application attestation and visibility for Fortanix CCM.

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## 2.0 MANAGING NODES USING FORTANIX CONFIDENTIAL COMPUTING MANAGER

1. Sign in to the Fortanix Confidential Computing Manager UI and navigate to the **Infrastructure** tab.
2. Click the IP address of the node that you want to investigate. An information screen opens.
3. On the information screen, you can choose to deactivate/delist the node or download the certificate that is used. To download the certificate, refer to the next section, *Download Confidential Computing Manager certificate*.

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## 3.0 DOWNLOAD CCM NODE ATTESTATION CERTIFICATE

To download the CCM node attestation certificate:

1. Go to the **Infrastructure** tab, and on the Compute Nodes page, click the compute node for which you want to download the certificate.

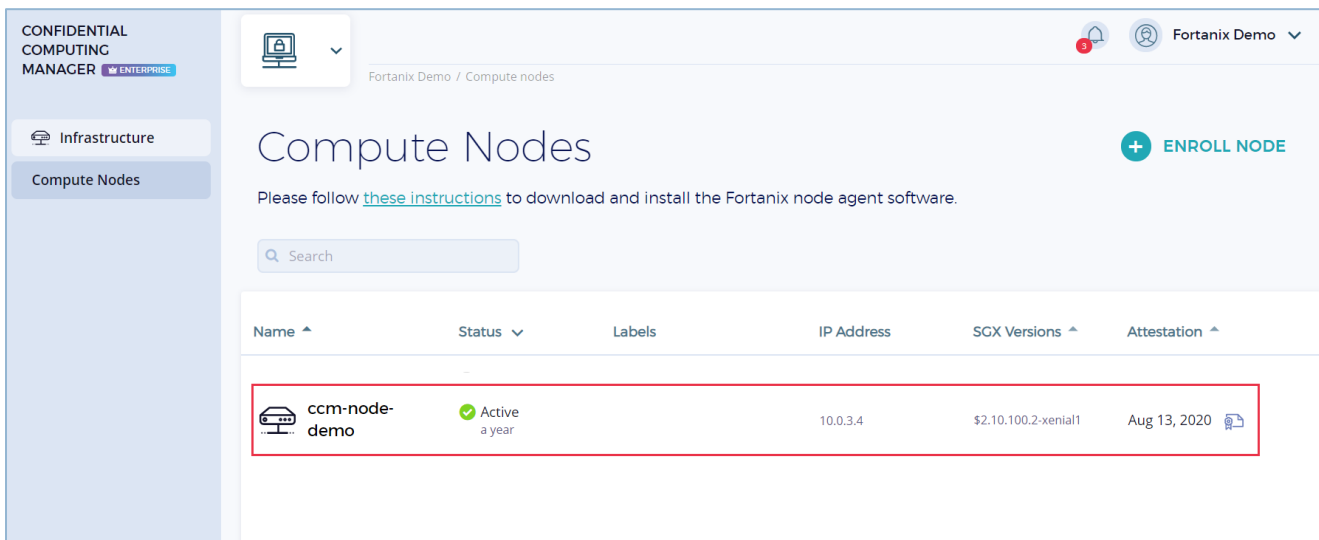


FIGURE 1: SELECT NODE

2. You can download the certificate from the Compute Node detailed view using the **Download** option on the right. This certificate contains Intel SGX details such as CPUSVN (CPU Security Version Number) of the compute node, MRENCLAVE of the node agent software, and so on, as seen from the screenshot below.

The screenshot shows the 'View node' page for a compute node named 'ccm-node-demo'. The interface includes a left-hand navigation menu with 'Infrastructure' and 'Compute Nodes' options. The main content area shows the node's status as 'Active' with a 'DELIST COMPUTE NODE' button. Below this, there are tabs for 'ATTESTATION' and 'LABELS'. The 'ATTESTATION' tab is selected, displaying the following information:

- SGX PSW Version: \$2.10.100.2-xenial1
- Latest attestation date: Aug 13, 2020

Under the 'Certificate' section, there is a 'DOWNLOAD' button highlighted with a red border. The certificate details shown are:

- Subject name: em-node-test
- Issuer name: Default Enclave Zone Root

FIGURE 2: DOWNLOAD CERTIFICATE

## 4.0 DOCUMENT INFORMATION

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### 4.1 DOCUMENT LOCATION

The latest published version of this document is located at the URL:

<https://support.fortanix.com/hc/en-us/articles/4414195452180-User-s-Guide-Compute-Nodes>

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### 4.2 DOCUMENT UPDATES

This document will typically be updated on a periodic review and update cycle.

For any urgent document updates, please send an email to: [support@fortanix.com](mailto:support@fortanix.com)

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